

Serial Number: 09/939,853A**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.



OIPE

RAW SEQUENCE LISTING

DATE: 06/09/2003

PATENT APPLICATION: US/09/939,853A

TIME: 13:56:26

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Output Set: N:\CRF4\06092003\I939853A.raw

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3 <110> APPLICANT: Burgess et al.
5 <120> TITLE OF INVENTION: Novel Proteins and Nucleic Acids Encoding Same
7 <130> FILE REFERENCE: 11401-099
9 <140> CURRENT APPLICATION NUMBER: 09/939,853A
10 <141> CURRENT FILING DATE: 2001-08-27
11 <150> PRIOR APPLICATION NUMBER: 60/228,191
12 <151> PRIOR FILING DATE: 2000-05-25
13 <150> PRIOR APPLICATION NUMBER: 60/267,300
14 <151> PRIOR FILING DATE: 2001-02-03
15 <150> PRIOR APPLICATION NUMBER: 60/269,961
16 <151> PRIOR FILING DATE: 2001-02-20
17 <150> PRIOR APPLICATION NUMBER: 60/277,337
18 <151> PRIOR FILING DATE: 2001-03-20
19 <160> NUMBER OF SEQ ID NOS: 150
20 <170> SOFTWARE: PatentIn Ver. 3.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 1065
23 <212> TYPE: DNA
24 <213> ORGANISM: Homo sapiens
25 <400> SEQUENCE: 1
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35 tcgatggagt gtctgtccag ttggggagg aggcctctgc tctctgggtc taaccttggg 120
36 agtgaatag tgacctccc ttggagccc agagctgggg agaaggccgt gctgtttaac 180
37 agctgcttga acctctctg cagagccaga gagagaggcg gggctggagg agatgtttgc 240
38 aagaacctaa ggtgaaagt catgcttcgc atctgttcca ccttggctcg agatactca 300
39 caatccagct ctctctaaa gctggagccc cgggaagaag agatcacct gtaagatccc 360
40 ctgacttgtg cagctaaaaa tgccttccaa aagagaggca accaggttcc tccaaaagatg 420
41 ttgaccttgc atccagtctt tccacagac gcttctcagg ctgaagtgtg tgcaggcacc 480
42 ttggagaggg tgcctcagtc tctgttcaac ggggcagatg gctgctgtgt ctgtttoggc 540
43 caggccaaac tgggaacat ctacaccatg atcggaaaag atgattccat gcagaaacctg 600
44 tgcattcttc cctgttccat ctcttggctc ttcaagctca taaaaggaaag caaggaaaaag 660
45 accgaggggc gttctcagc cgggttttcc ggcgttgaag tctgggggaa ggaggagaa 720
46 ctggagggaac tctgttcgga cgtgagccag ggcagcctgc aggaaggcca gtcccggggc 780
47 ctgtacctct gtaaggaccc cactcggggc accagctgc agaaccagag ctagctgcgg 840
48 ggcctccacg cagagagggc tgccttttcc ctggatgcgc ccattgcctc ccgcaggagc 900
49 caccacacag actgtgatga cgaagaccac cgcacctcac acgtgttctt cacaactgac 960
50 atctaccact accggatgga gagagagggg aaagggggaa ttctgcttcc gatttggaa 1020
51 ctgaaagtgc ggaagactct tgaatacaag gaaacagttc attaa 1065
52 <210> SEQ ID NO: 2
53 <211> LENGTH: 354
54 <212> TYPE: PRT
55 <213> ORGANISM: Homo sapiens
56 <400> SEQUENCE: 2

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DATE: 06/09/2003

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60 Met Thr Gly Leu Leu Leu Ser Leu Gln Ser Gly Cys Val Ala Ala
61      1          5          10          15
62 Ile Thr Ser Met Ser Met Glu Cys Leu Cys Ser Leu Gly Ala Arg Leu
63      20          25          30
64 Cys Leu Ser Arg Ser Thr Leu Gly Ser Glu Ile Val Thr Val Pro Leu
65      35          40          45
66 Ser Pro Arg Ala Gly Glu Lys Ala Val Pro Val Asn Ser Cys Leu Asp
67      50          55          60
68 Pro Leu Trp Arg Ala Ala Glu Arg Gly Gly Ala Gly Gly Asp Val Ala
69      65          70          75          80
70 Lys Asn Leu Arg Val Lys Val Met Leu Arg Ile Cys Ser Thr Leu Ala
71      85          90          95
72 Arg Asp Thr Ser Glu Ser Ser Ser Phe Leu Lys Val Asp Pro Arg Lys
73      100          105          110
74 Lys Gln Ile Thr Leu Tyr Asp Pro Leu Thr Cys Gly Gly Gln Asn Ala
75      115          120          125
76 Phe Gln Lys Arg Gly Asn Gln Val Pro Pro Lys Met Phe Ala Phe Asp
77      130          135          140
78 Ala Val Phe Pro Gln Asp Ala Ser Gln Ala Glu Val Cys Ala Gly Thr
79      145          150          155          160
80 Val Ala Glu Val Ile Gln Ser Val Val Asn Gly Ala Asp Gly Cys Val
81      165          170          175
82 Phe Cys Phe Gly His Ala Lys Leu Gly Lys Ser Tyr Thr Met Ile Gly
83      180          185          190
84 Lys Asp Asp Ser Met Gln Asn Leu Gly Ile Ile Pro Cys Ala Ile Ser
85      195          200          205
86 Trp Leu Phe Lys Leu Ile Asn Glu Arg Lys Glu Lys Thr Gly Ala Arg
87      210          215          220
88 Phe Ser Val Arg Val Ser Ala Val Glu Val Trp Gly Lys Glu Glu Asn
89      225          230          235          240
90 Leu Arg Asp Leu Leu Ser Glu Val Ala Thr Gly Ser Leu Gln Asp Gly
91      245          250          255
92 Gln Ser Pro Gly Val Tyr Leu Cys Glu Asp Pro Ile Cys Gly Thr Gln
93      260          265          270
94 Leu Gln Asn Gln Ser Glu Leu Arg Ala Pro Thr Ala Glu Lys Ala Ala
95      275          280          285
96 Phe Phe Leu Asp Ala Ala Ile Ala Ser Arg Arg Ser His Gln Gln Asp
97      290          295          300
98 Cys Asp Glu Asp Asp His Arg Asn Ser His Val Phe Phe Thr Leu His
99      305          310          315          320
100 Ile Tyr Gln Tyr Arg Met Glu Lys Ser Gly Lys Gly Gly Ile Leu Leu
101      325          330          335
102 Ser Ile Trp Asn Leu Lys Val Gly Arg Asn Leu Glu Asn Lys Glu Thr
103      340          345          350
104 Val His
105
106 <110> SEQ ID NO: 3
107 <111> LENGTH: 366
108 <112> TYPE: PRT
109 <113> ORGANISM: Homo sapiens

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RAW SEQUENCE LISTING

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TIME: 10:56:26

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135 <400> SEQUENCE: 3

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136 Glu Val Ile Leu Tyr Asp Pro Ala Ala Gly Pro Pro Gly Ser Ala Gly
137 1 5 10 15
138 Pro Arg Arg Ala Ala Thr Ala Ala Val Pro Lys Met Phe Ala Phe Asp
139 20 25 30
140 Ala Val Phe Pro Gln Asp Ser Glu Gln Ala Glu Val Cys Ser Gly Thr
141 35 40 45
142 Val Ala Asp Val Leu Gln Ser Val Val Ser Gly Ala Asp Gly Cys Ile
143 50 55 60
144 Phe Ser Phe Gly His Met Ser Leu Gly Lys Ser Tyr Phe Met Ile Gly
145 65 70 75 80
146 Lys Asp Ser Ser Pro Gln Ser Leu Gly Ile Val Pro Cys Ala Ile Ser
147 85 90 95
148 Trp Leu Phe Arg Leu Ile Glu Glu Arg Arg Glu Arg Phe Gly Thr Arg
149 100 105 110
150 Phe Ser Val Arg Val Ser Ala Val Glu Val Cys Gly Arg Asp Gln Ser
151 115 120 125
152 Leu Arg Asp Leu Leu Ala Glu Val Ala Pro Gly Ser Leu Gln Asp Thr
153 130 135 140
154 Gln Ser Pro Gly Val Tyr Leu Arg Glu Asp Pro Val Cys Gly Ala Gln
155 145 150 155 160
156 Leu Gln Asn Gln Ser Glu Leu Arg Ala Pro Thr Ala Glu Lys Ala Ala
157 165 170 175
158 Phe Tyr Leu Asp Ala Ala Leu Ala Ala Arg Ser Thr Ser Arg Ala Gly
159 180 185 190
160 Cys Gly Glu Asp Ala Arg Arg Ser Ser His Met Leu Phe Thr Leu His
161 195 200 205
162 Val Tyr Gln Tyr Arg Met Glu Lys Cys Gly Arg Gly Gly Met Ser Gly
163 210 215 220
164 Gly Arg Ser Arg Leu His Leu Ile Asp Leu Gly Ser Cys Glu Ala Ala
165 225 230 235 240
166 Ala Gly Arg Ala Gly Glu Ala Ala Gly Gly Pro Leu Cys Leu Ser Leu
167 245 250 255
168 Ser Ala Leu Gly Ser Val Ile Leu Ala Leu Val Asn Gly Ala Lys His
169 260 265 270
170 Val Pro Tyr Arg Asp His Arg Leu Thr Met Leu Leu Arg Glu Ser Leu
171 275 280 285
172 Ala Thr Ala Gly Cys Arg Thr Thr Met Ile Ala His Val Ser Asp Ala
173 290 295 300
174 Pro Ala Gln His Ala Glu Thr Leu Ser Thr Val Gln Leu Ala Ala Arg
175 305 310 315 320
176 Ile His Arg Leu Arg Arg Lys Lys Ala Lys Tyr Ala Ser Ser Ser Ser
177 325 330 335
178 Gly Gly Glu Ser Ser Cys Glu Glu Gly Arg Ala Arg Arg Pro Pro His
179 340 345 350
180 Leu Arg Pro Phe His Pro Arg Thr Val Ala Leu Asp Pro Asp
181 355 360 365

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186 <10> SEQ ID NO: 4

187 <11> LENGTH: 130

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DATE: 06/09/2003

PATENT APPLICATION: US/09/939,853A

TIME: 18:06:26

Input Set : N:\AMC\SEQUENCE LISTING CURA-399 US.DOC

Output Set: N:\CRF4\06092003\I939853A.raw

108 <212> TYPE: PRT

109 <213> ORGANISM: Mus musculus

111 <400> SEQUENCE: 4

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113      1              5              10              15
114 Met Gln Asn Leu Gly Ile Ile Pro Cys Ala Ile Ser Trp Leu Phe Lys
115      20              25              30
116 Leu Ile Asn Glu Arg Lys Glu Lys Thr Gly Ala Arg Phe Ser Val Arg
117      35              40              45
118 Ile Ser Ala Val Glu Val Trp Gly Lys Glu Glu Asn Leu Arg Asp Leu
119      50              55              60
120 Leu Ser Glu Val Ala Thr Gly Ser Leu Gln Asp Gly Gln Ser Pro Gly
121      65              70              75              80
122 Val Tyr Leu Cys Glu Asp Pro Ala Glu Lys Ala Ala Phe Phe Leu Asp
123      85              90              95
124 Ala Ala Ile Ala Ser Arg Arg Ser Asn Gln Gln Asp Cys Asp Glu Asp
125      100             105             110
126 Asp His Arg Asn Ser His Met Leu Phe Thr Leu His Ile Tyr Gln Tyr
127      115             120             125
128 Arg Met
129      130

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140 <10> SEQ ID NO: 5

141 <11> LENGTH: 147

142 <12> TYPE: PRT

143 <213> ORGANISM: Mus musculus

145 <400> SEQUENCE: 5

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146 Gly Lys Ser Tyr Thr Met Ile Gly Lys Asp Ser Ser Pro Gln Ser Leu
147      1              5              10              15
148 Gly Ile Val Pro Cys Ala Ile Ser Trp Leu Phe Arg Leu Ile Asp Glu
149      20              25              30
150 Arg Lys Glu Arg Leu Gly Thr Arg Phe Ser Ile Arg Val Ser Ala Val
151      35              40              45
152 Glu Val Cys Gly His Asp Gln Ser Leu Arg Asp Leu Leu Ala Glu Val
153      50              55              60
154 Ala Ser Gly Ser Leu Gln Asp Thr Gln Ser Pro Gly Val Tyr Leu Arg
155      65              70              75              80
156 Glu Asp Pro Val Cys Gly Thr Gln Leu Gln Asn Gln Asn Glu Leu Arg
157      85              90              95
158 Ala Pro Thr Ala Glu Lys Ala Ala Phe Tyr Leu Asp Ala Ala Leu Ala
159      100             105             110
160 Ala Arg Ser Thr Ser Arg Ala Gly Cys Gly Glu Glu Ala Arg Arg Ser
161      115             120             125
162 Ser His Met Leu Phe Thr Leu His Val Tyr Gln Tyr Arg Val Glu Lys
163      130             135             140
164 Cys Gly Gln
165      145

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177 <10> SEQ ID NO: 6

178 <11> LENGTH: 302

179 <12> TYPE: PRT

RAW SEQUENCE LISTING

DATE: 06/09/2003

PATENT APPLICATION: US/09/939,853A

TIME: 14:56:26

Input Set : N:\AMC\SEQUENCE LISTING CURA-399 US.DOC

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280 <213> ORGANISM: Drosophila melanogaster
282 <400> SEQUENCE: 6
283 Met Ala Thr Thr Ser Thr Ser Asn Met Ser Arg Asn Gly Gly Phe Lys
284 1 5 10 15
286 Gly Ala Leu Gln Arg Ala Pro Pro Pro Met Pro Pro Thr Leu Ile Arg
287 20 25 30
289 Arg Leu Ser Ser Arg Glu Cys Tyr Gly Val Gly Lys Val Lys Val Met
290 35 40 45
292 Leu Arg Val Ala Asp Arg Asp Arg Asn Ser Gly Gly Thr Glu Pro Asp
293 50 55 60
295 Phe Met Ala Leu Asp Lys Lys Lys Arg Gln Val Thr Leu Thr Asp Pro
296 65 70 75 80
298 Arg Thr Ala Cys Pro Pro Pro Gln Ala Ala Gln Glu Arg Ala Pro Met
299 85 90 95
301 Val Ala Ala Pro Lys Met Phe Ala Phe Asp Asn Leu Phe Thr Gly Glu
302 100 105 110
304 Asp Lys Gln Ser Asp Val Cys Ala Ser Ala Leu Ser Glu Val Ile Pro
305 115 120 125
307 Ala Val Leu Glu Gly Ser Asp Gly Cys Leu Leu Ala Met Gly Tyr Pro
308 130 135 140
310 Ala Thr Gly Gln Ala Gln Thr Val Leu Gly Glu Leu Gly Gly Gly Ser
311 145 150 155 160
313 Gly Ser Gly Ser Ala Ser Gly Ser Gly Val Ala Cys Ser Leu Gly Ala
314 165 170 175
316 Ala Pro Cys Ala Ile Ala Trp Leu Tyr Lys Gly Ile Gln Glu Arg Arg
317 180 185 190
319 Gln Lys Ser Gly Ala Arg Phe Ser Val Arg Val Ser Ala Val Gly Val
320 195 200 205
322 Ser Ala Thr Lys Pro Asp Ala Leu Ser Gln Asp Leu Leu Ile Ser His
323 210 215 220
325 Ala Ala Glu Tyr Gly Val Tyr Ser His Ile Lys Pro Asn Ala Leu Phe
326 225 230 235 240
328 Ile His Ser Pro Leu Phe Phe Trp Ser Gln Tyr Trp Asn Ser Gly
329 245 250 255
331 Ser Asp Tyr Gly Tyr Thr Glu Ser Asp Asp Ser Pro Gly Ile Tyr Leu
332 260 265 270
334 Arg Asp Asp Phe Leu Ala Val Gln Arg Asn Tyr Val His Pro Pro Pro
335 275 280 285
337 Ser Val Arg Pro Phe Ser Ser Thr Gln Arg Ser Pro Asp Ala
338 290 295 300
341 <210> SEQ ID NO: 7
342 <211> LENGTH: 359
343 <212> TYPE: PRT
344 <213> ORGANISM: Caenorhabditis elegans
346 <400> SEQUENCE: 7
347 Met Glu Ala Cys Ser Ser Lys Thr Ser Leu Leu Leu His Ser Pro Leu
348 1 5 10 15
350 Arg Thr Ile Pro Lys Leu Arg Leu Cys Ala Ser Ile Ser Ser Glu Asp
351 20 25 30

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VERIFICATION SUMMARY

DATE: 06/09/2003

PATENT APPLICATION: US/09/939,853A

TIME: 18:56:27

Input Set : N:\AMC\SEQUENCE LISTING CURA-399 US.DOC

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